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ABSTRACT

This guide contains information helpful in developing curricula for grades K through 12 and provides the following: (1) rationale for developing school curricula; (2) a glossary of related educational terms, such as "competencies," "learning domains," and "needs assessment"; (3) a reference to the availability of the New Mexico State Board of Education's "Educational Standards for New Mexico Schools" (ESNMS); (4) guidelines for conducting a needs assessment; (5) suggestions for developing exit level and checkpoint student competencies; (6) tips for curriculum evaluation; (7) sample curriculum pages for the composition strand of a grades K through 12 language arts curriculum; and (8) sample curriculum pages for some New Mexico State Department of Education competencies shown in a sequential, checkpoint-to-exit format. The latter include competency statements in the areas of science, social studies, health, art, music, and mathematics. Appendix A contains instructional program planning and implementation guidelines from the ESNMS for language arts, mathematics, science, social studies, physical education, and the fine and practical arts. Appendix B presents goals and objectives of the New Mexico High School Proficiency Examination for the content areas of community resources, occupational knowledge, consumer economics, mental and physical health, and government and law. Also appended are specifications for skills and tasks used in assessing students' writing skills. (RH)

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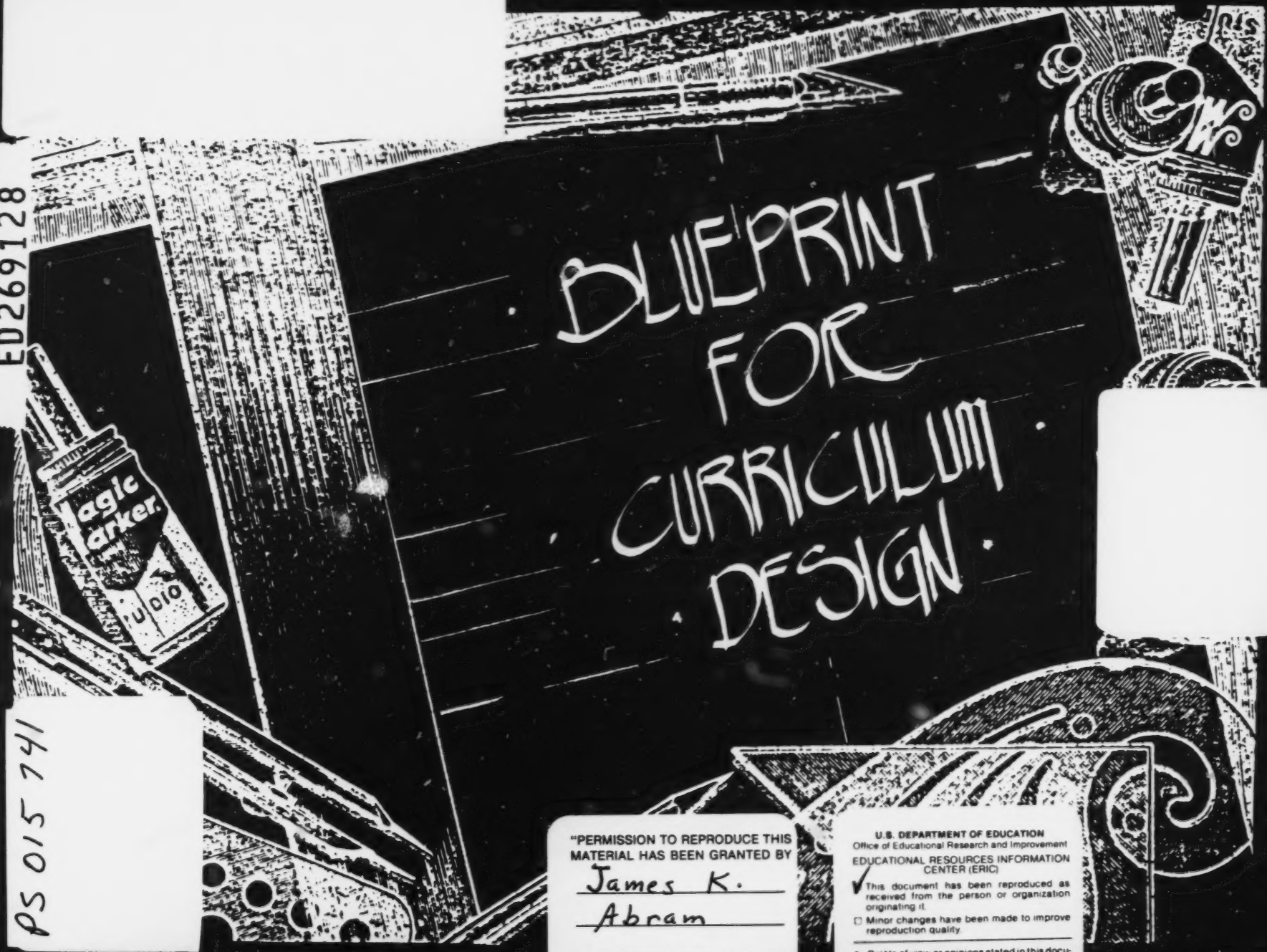

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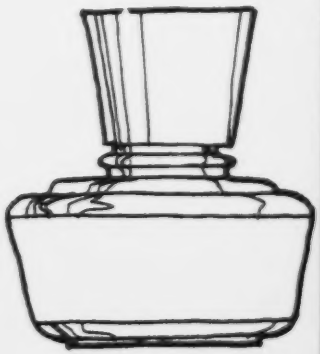
We express our appreciation to Paula Sass Gottlieb and Sharon Starr Morris for the information from their curriculum publications. We also thank the SDE staff for their input, Pat Demny and Shel Taylor for their technical assistance, and Vicki Breen for cover lettering.

I. WHY DEVELOP CURRICULUM?

1. To meet the specific needs of your district's students.
2. To ensure the scope and sequence of instruction for all students at all levels.
3. To see how well subjects are being taught.
4. To check for the appropriateness of courses.
5. To identify gaps in your program.
6. To find out where or when changes are needed.
7. To provide a valuable tool to all teachers, especially new teachers.
8. To communicate the expectations of the school district to teachers and the general public.
9. To meet Educational Standards for New Mexico Schools.



II. WHAT DO WE MEAN ?

ARTICULATION	Communication among and across grade levels to ensure sequential instruction. (The elementary program must relate to the junior high program, the junior high program to the elementary and high school, and the high school to all.)
COMPETENCIES	Statements of measurable sequential levels of student performance. These encompass the cognitive, affective, and psychomotor domains. Competencies are basically program objectives written in terms of learner outcomes.

CHECKPOINT COMPETENCIES	Competencies established at specified sequential points in the curriculum. These points are determined by the district's grade level organization (K-8, 9-12; K-3, 4-6, 7-8, 9-12; etc.).
EXIT COMPETENCIES	Statements of student performance based on achievement expected at graduation or program exit.
CURRICULUM	All programs offered in the district.
CURRICULUM GUIDE	The written articulation of a curriculum; a blueprint for building educated students.
DEMOGRAPHIC DATA	Information about the particular characteristics of the population of a community.

DISTRICT GOALS

Broad statements of ultimate student performance expected of all students by the district.

(It is assumed that district goals have been developed according to Educational Standard 1.1.1a and are contained in your local board policy manual.)

EVALUATION

A process which provides meaningful information for decision making. It is a continuous process that collects, processes, and converts relevant data to a form that allows decision makers to assign value or worth to a process, program, or product. Evaluation should provide the information base for planning,

	managing, and improving the total educational program of the district/school.
EVALUATION DESIGN	A predetermined method of organizing information for evaluation.
LEARNING DOMAINS:	
Affective Domain	The acquisition of particular attitudes, values, or feelings.
Cognitive Domain	The acquisition of particular knowledge or information.
Psychomotor Domain	The acquisition of fine and gross motor skills that emphasize observable physical responses.
LEARNER OUTCOME	What the students are expected to be able to do as a result of instruction.

NEED:

Instructional	An instructional need exists when a major discrepancy occurs between actual student(s) achievement and expected achievement as stated in the written curriculum. Achievement below or above expected levels shall reflect need.
Program	A program need exists when a. a program that should be included in the curriculum is not included, or b. a program that is included in the curriculum should not be, or c. a program that is appropriately included in the curriculum is inappropriately addressed.*

*From EDUCATIONAL STANDARDS FOR NEW MEXICO SCHOOLS.

NEEDS ASSESSMENT: The collection and analysis of information to determine if a particular educational program is bringing about the desired learner performance. Instructional and program needs assessments are addressed separately.

Instructional Needs Assessment

Evaluate student progress toward achieving checkpoint competencies in each required program area.

A wide variety of tests and data collection instruments can be used to measure student achievement.

Compare actual student achievement (group data) with the expected level of achievement.

The information obtained from this analysis will indicate student nee

Program Needs Assessment	**Review** EDUCATIONAL STANDARDS FOR NEW MEXICO SCHOOLS for state-required programs. Develop a procedure for determining if new programs should be added and include a method of gathering perceptions of your students, professional staff, and community members. Develop a procedure for examining regional, national, and international data (statistical and demographic) that are applicable for each program area. With an analysis of this information and with information obtained from the instructional needs

assessment process, decisions about program change can be made.

SCOPE AND SEQUENCE — The range of competencies in the curriculum ordered in a continuous progression.

SEQUENTIAL LEARNING — Instruction which is related and continuous.

III. WHAT ABOUT DISTRICT GOALS?

Your district's goals are probably already well determined. They are included in your board's policy handbook and should address the State Board of Education's goals listed in the preface of Educational Standards for New Mexico Schools. Community input is necessary for any changes or additions.

IV. DOES YOUR CURRICULUM MEET THE NEEDS OR REQUIREMENTS OF YOUR STUDENTS, STAFF, COMMUNITY, AND STATE?

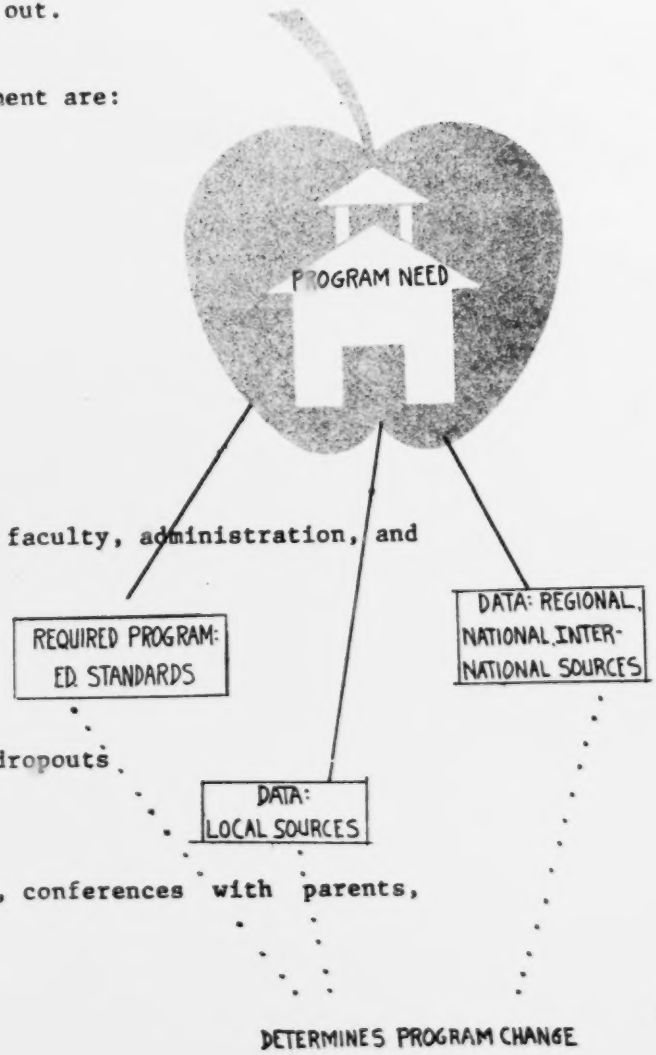
A formal or informal needs assessment will help you to find out.

Sources of information available in creating a needs assessment are:

1. student
   - classroom performance results (grades, other)
   - standardized test results
   - student input (including alumni)
   - informal evaluation instrument results

2. staff
   - existing curriculum guides and program descriptions
   - identification of instructional area concerns by faculty, administration, and support personnel
   - research on teacher and school effectiveness

3. community
   - follow-up studies of both high school graduates and dropouts
   - minutes of local school board meetings
   - public hearings on education issues
   - parental concerns as voiced in letters, PTO meetings, conferences with parents, and parent advisory groups



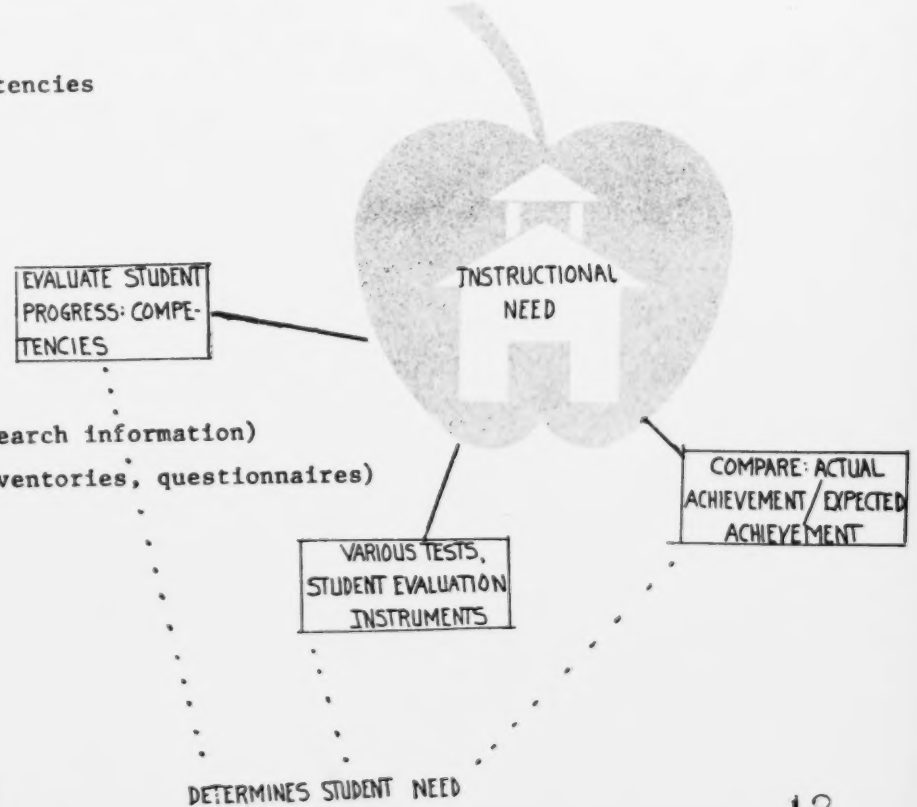
- community concerns voiced by labor, business, industry, and other special interest groups
- college and university input

4. state
   - Educational Standards for New Mexico Schools
   - State Board of Education policies (including Provision III), rules, and regulations
   - New Mexico Basic Skills Plan
   - state-required student exit competencies

5. national
   - studies and statistics

Methods of collecting data:

- direct observation and notation
- document analysis (test data, research information)
- questioning (surveys, interest inventories, questionnaires)
- expert opinion (consultants)
- curriculum mapping
- accreditation recommendations


EVALUATE STUDENT PROGRESS: COMPETENCIES
INSTRUCTIONAL NEED
COMPARE: ACTUAL ACHIEVEMENT / EXPECTED ACHIEVEMENT
VARIOUS TESTS, STUDENT EVALUATION INSTRUMENTS
DETERMINES STUDENT NEED

V. HOW DO YOU DEVELOP EXIT LEVEL STUDENT COMPETENCIES?

1. Write down the district goals which relate to your program.

2. Gather information from your needs assessments that will give you a picture of your community and that will relate to your student population. This information should be utilized to help you develop an appropriate curriculum for your students.

3. Be sure to include the state-mandated exit level student competencies* for each content area and the goals and objectives of the New Mexico Basic Skills Plan.

4. List apparent trends in the following areas:

   a. the CTBS scores for your program,
   b. the New Mexico High School Proficiency Examination results,
   c. achievement test results for your program,
   d. data compiled from individual courses and programs,
   e. any other helpful source of information from school records, and the
   f. Proficiency Assessment Checkpoint Examination.

The data which you accumulated in #2 and #4 should be examined together.

*Required for the 1986-87 graduating class.

5. Analyze and decide how your curriculum should reflect the trends and demographic data, and write a statement indicating how you will use the information in planning your curriculum.

6. Write broad statements of what you want students to achieve by program exit. Write these statements in learner outcome terms. Be sure to address the trends you found and examined in #2-5. The statements will be few in number, broad in scope, and measurable. Now be sure they reflect your district goals.

THESE BROAD STATEMENTS ARE YOUR STUDENT EXIT COMPETENCIES.

Examples of exit competencies written in learner outcome terms are:

- Students, upon graduating from New Mexico high schools, shall demonstrate knowledge of New Mexico history and the ability to analyze that history relative to cultural, economic, political, and social development (social studies).

- The student will use mathematical concepts and skills in everyday problems relating to consumer affairs (mathematics).

- The student will exhibit sensory awareness and problem solving abilities through art (visual arts).

VI. WHAT ABOUT CHECKPOINT COMPETENCIES?

You must develop student competencies which are measurable at identified points in each required program.

The state has developed suggested checkpoint competencies at grades 3, 5, and 8. Your competencies will reflect the structure of your district (for example, K-8, 9-12; K-3, 4-6, 7-8, 9-12; etc.).

USE ALL THE INFORMATION FROM THE PREVIOUS PAGE TO ASSIST IN DEVELOPING CHECKPOINT COMPETENCIES.

1. Look at each exit level competency. Make a list of the things students will need to do to accomplish the competency. (Caution: Don't make them so small and numerous that they are overwhelming.) Include the cognitive (knowing), affective (feeling), and psychomotor (doing) areas where applicable in the abilities you list.

2. Refer to the suggested grades 3, 5, and 8 state content area competencies.

   (USE BRAINSTORMING TECHNIQUES AS WELL AS A VARIETY OF RESOURCES WITH YOUR COMMITTEE. FOR EXAMPLE, USE TEXTBOOKS, SAMPLE CURRICULUM GUIDES, AND ANY RESOURCES OR REFERENCES WHICH WILL STIMULATE THINKING AND HELP DEVELOP COMPETENCIES.)

3. Take these steps or behaviors and write them in terms of learner outcomes.

4. Now arrange them to show sequential development. In some cases, sequential development will not be evident until the class level objectives are written. (Class level objectives should be developed from checkpoint competencies.)

These are your checkpoint competencies.

It is important for all staff members to have input into these competencies and objectives. Be sure they are presented to and reviewed by staff!

REMEMBER:

- THE LIFE COMPETENCIES FROM THE NEW MEXICO BASIC SKILLS PLAN SHOULD BE INCLUDED WHERE APPLICABLE AND APPROPRIATE, AND
- CHECKPOINT COMPETENCIES SHOULD BE MEASURABLE BUT NOT ALWAYS BY OBJECTIVE TESTS OR PAPER/PENCIL MEANS.

Examples of checkpoint competencies written in learner outcome terms are:

- The student will identify and describe the state's symbols (3rd grade social studies).
- The student will determine the monetary change of a specified purchase (5th grade mathematics).
- The student will exhibit imagination and resourcefulness by formulating plans and ideas and by adapting them to the media used (8th grade visual arts).

VII. HOW DO YOU EVALUATE YOUR CURRICULUM ?

Evaluation should be considered at each stage of curriculum development both formally and informally.

AN INFORMAL METHOD OF EVALUATION

As checkpoint competencies are developed, remember that they can always be changed. Personal notes should be kept on the effectiveness of the curriculum. Notes should also be kept indicating which competencies generated student success and which did not. These notes will be most beneficial in determining the appropriateness of the curriculum. You may find competencies which were inappropriate or which were not achievable because of the lack of proper materials, inappropriate grade placement or other reasons. Use this information for necessary revisions or updating of the documents.

A FORMAL METHOD OF EVALUATION FOR THE DISTRICT'S CURRICULUM

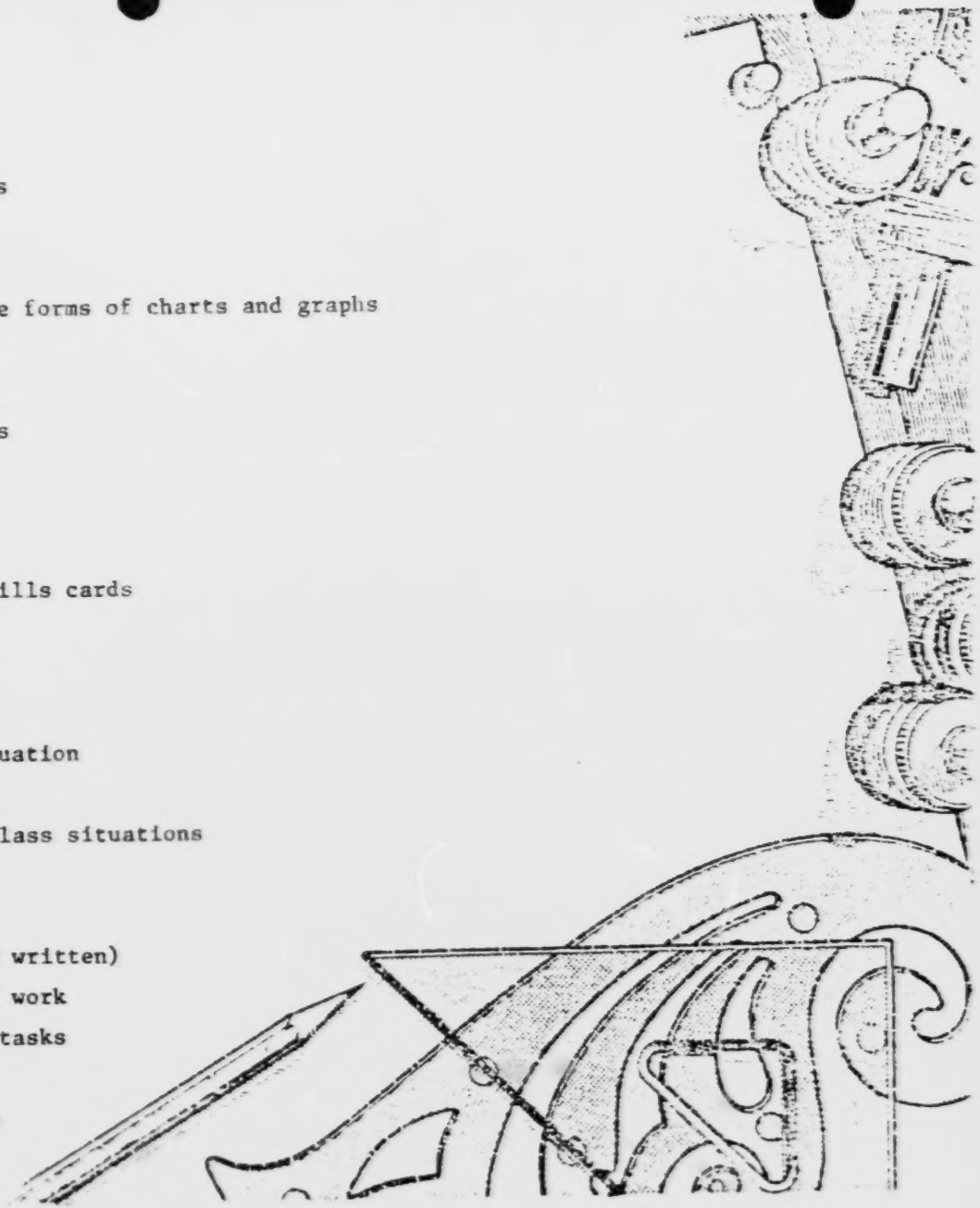
- Listed below are some of the instruments, techniques, behavior patterns, and/or situations one might use to determine achievement of competencies. Remember that student evaluation is required and essential to curriculum evaluation. Some of the following may also be used to collect and organize such information.

A. Observation techniques

1. Anecdotal notes
2. Information in the forms of charts and graphs
3. Observations by
   a. teacher aides
   b. administrators
   c. parents
   d. peers
4. Likert scales
5. Record keeping/skills cards
6. Interviews
7. Questionnaires
8. Opinion surveys
9. Student self-evaluation

B. Examples of work or class situations

1. Projects
2. Reports (oral and written)
3. Actual samples of work
4. Structured group tasks
5. Simulations
6. Graphs and charts



C. Information from office records

1. Absenteeism
2. Attendance data
3. Transfer requests
4. Enrollment data
5. Inventories

D. Tests

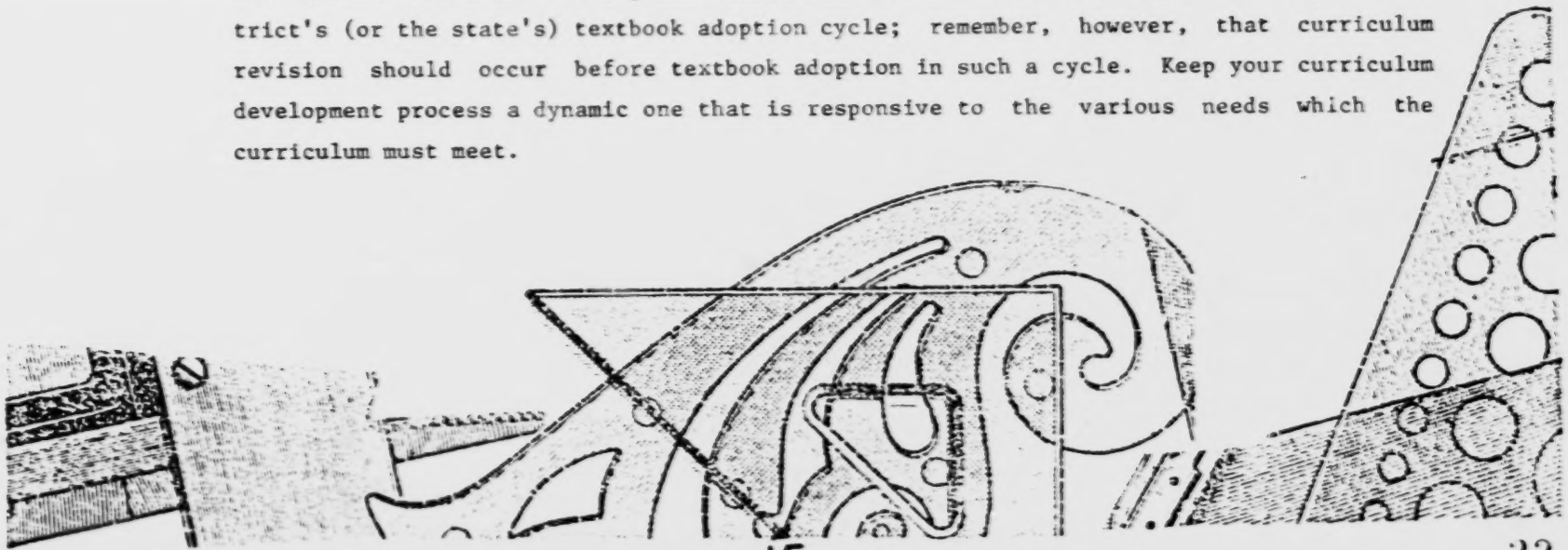
1. Performance tests
2. Objective tests
3. Placement tests
4. Mastery tests
5. Unit chapter tests
6. Criterion referenced tests

- For each required K-12 program, compile and analyze that data according to information that shows if competencies were attained or not attained. Use this information to determine if competencies are realistic or if revision is needed.

- Submit the data to the person who will be responsible at the district level for compilation and analysis. The analysis should also help you make necessary revisions and/or changes in the curriculum for the following year. You may want to expend more resources on high priority areas that show a need for improvement.

DEVELOPING CURRICULA IS AN ONGOING PROCEDURE. REVISIONS WILL BE A CONSTANT COMPONENT OF THIS PROCESS.

You should establish a regular curriculum revision cycle, perhaps tied to your district's (or the state's) textbook adoption cycle; remember, however, that curriculum revision should occur before textbook adoption in such a cycle. Keep your curriculum development process a dynamic one that is responsive to the various needs which the curriculum must meet.



SAMPLE CURRICULUM PAGES FOR THE COMPOSITION STRAND OF A LANGUAGE ARTS CURRICULUM

VIII. SAMPLES — These samples are included only as an example of a format, not as a model to be followed.

Exit Competency	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Use writing as a process of communicating, involving: - Formulating ideas - Using reasoning strategies - Collecting and organizing information - Determining the relationships - Drafting - Using vivid and precise language - Arranging paragraphs in an appropriate order and building transitions between them - Revising	The learner will dictate a description of an object or an event.	The learner will write a simple sentence about a picture, object, or event using actual or invented spelling.	The learner will write several sentences about a picture, object, event, or situation.	The learner will write a narrative paragraph given a topic sentence.	The learner will write narratives and descriptions.	The learner will write narratives and descriptions using the technique of sentence combining.
	Activities: Describe: - Objects in school environment - Animals - Birthdays and holidays - Super heroes - Toys - Trips	Activities	Activities	Activities: Use topic sentences which are open to various types of paragraph development Example: "The car screeched to a stop!"	Activities: Write: - Poems - Songs - Descriptive and narrative paragraphs	Activities: Write: - Poems - Songs - Descriptive and narrative paragraphs
	Materials	Materials	Materials	Materials	Materials	Materials
	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation

In incorporating writing instruction into the curriculum (in language arts or across all the content areas), the developmental nature of the writing process must be stressed. One model that may be used is based on a five-step process: pre-writing (brainstorming), drafting, revising, editing, and publishing.

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
The learner will write material which includes plot, setting, character, and description.	The learner will write material with emphasis on personal ideas, thoughts, and feelings.	The learner will expand creativity through the writing of comparison and contrast.	The learner will demonstrate knowledge of objective and subjective writing.	The learner will research and write non-fictional material.	The learner will develop a critical essay.	The learner will demonstrate awareness of various writing styles.
Activities	**Activities**	**Activities**	**Activities**	**Activities**	**Activities**	**Activities**
Write: - Short stories - Plays	Write: - Journals - Auto-biographies - Poetry - Fiction - Plays	Write: - Essays - T.V. commercials - Fiction - Poetry - Song writing	Write: - Commercials - Reports	Write: - Biographies - Factual reports		Model writing of various poets, fiction and nonfiction writers, play-wrights, and song writers.
Materials	**Materials**	**Materials**	**Materials**	**Materials**	**Materials**	**Materials**
Evaluation	**Evaluation**	**Evaluation**	**Evaluation**	**Evaluation**	**Evaluation**	**Evaluation**

SAMPLE CURRICULUM PAGES

FOR SOME N. M. S. D. E. COMPETENCIES

SHOWN IN A SEQUENTIAL CHECKPOINT-TO-EXIT FORMAT

SCIENCE

The student shall:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Describe a situation, event, or life form using more than one of the senses.	Make observations in a variety of ways using all of the senses.	Distinguish between qualitative and quantitative observations.	Describe objects and events on the basis of observable characteristics.

SOCIAL STUDIES

The students shall demonstrate knowledge and understanding of the United States political system and individual rights and responsibilities within the system. To meet this competency, the students will:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Identify, practice and explain rules, rights and responsibilities of individuals in the home and school.	Interpret, practice and respect rules, rights and responsibilities in the context of the home, school, and community.	Identify and distinguish between individual rights and responsibilities in the United States and explain how they relate to decision making.	Generalize about rights and freedom (implied/expressed) in significant United States government documents.

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HEALTH

The student shall:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Identify components of wellness and describe how decision making affects personal health practices.	Illustrate and compare immediate and long-range effects of personal health choices.	Analyze areas in which personal health behaviors may need improvement or change.	Evaluate and integrate knowledge of personal health practices and principles in decision making for the attainment of optimal health.

ART

The student shall:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Respond to art and make aesthetic judgements by identifying names of basic colors and shapes.	Respond to art and make aesthetic judgements by having a basic understanding of the elements of design in an artwork (line, texture, form, or color).	Respond to art and make aesthetic judgements by understanding and being able to discuss elements of design in their own and others' work, and being able to see how these can be manipulated to achieve given effects.	Respond to art and make aesthetic judgements.

MUSIC

The student shall:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Respond to musical form of simple songs (i.e., phrases, repetition or contrast, AB, ABA, verse-refrain, etc.).	Recognize and respond to musical forms of simple songs and/or compositions (i.e., phrases, repetition or contrast, AB, ABA, ABC, rondo, introduction, coda, etc.	Demonstrate knowledge of complex musical forms (i.e., theme and variation and canon).	Demonstrate knowledge of more complex forms.

MATHEMATICS

The student shall:

Third Grade Checkpoint	Fifth Grade Checkpoint	Eighth Grade Checkpoint	Twelfth Grade Checkpoint
Identify the fractions for the parts of objects cut into halves, thirds, and fourths.	Express a percent as a number of hundreds.	Compute the percentage, base, or the rate of a problem involving percent.	Apply the principles of percentage to problem solving.

NOTE: All examples are to be used only as guidelines for further local clarification of competency statements.

APPENDIX A

INSTRUCTIONAL PROGRAM PLANNING AND IMPLEMENTATION*

A.4.1 Curriculum

A.4.1.1 The written curriculum of each district, school, and program shall:

a. Be based upon an assessment of instructional and program needs.
b. Specify student competencies expected at identified points during the program.
c. Address, but not necessarily be limited to, the competencies and disciplines identified in Educational Standards 4.1.3 and 4.1.4 and the New Mexico Basic Skills Plan.
d. Define the sequential progression of competencies to be attained in each program.
e. Provide for the evaluation of student performance both during and upon completion of the program.

A.4.1.2 The delivered curriculum of each district, school, and program shall be congruent with the written curriculum and shall:

a. Stimulate intellectual development.
b. Assist students to develop positive feelings toward themselves and others.
c. Provide varied learning experiences.
d. Include content and concepts from various cultures.
e. Assist students to develop an understanding of cultural diversity.
f. Provide students opportunities to broaden their areas of interest.
g. Be planned and organized to meet individual needs.
h. Be conducted in a facility which supports adequate learning experiences for students, supervision of students, and the health and well-being of students.
i. Include application of skills and knowledges introduced in the instructional program with emphasis upon life competencies.
j. Provide sufficient opportunities to acquire basic skills and sufficient evaluation checkpoints to ensure mastery of those skills.
k. Ensure adequate allotted and engaged time on task for achieving at the level of competency in each program determined by the local district.
l. Utilize concrete manipulative materials.

* From EDUCATIONAL STANDARDS FOR NEW MEXICO SCHOOLS.

m. Utilize the student's home language as a vehicle for learning when necessary and practical.
n. Develop English language skills for those students with a language other than English.
o. Utilize instructional materials which are:
   (1) Supportive of the written curriculum.
   (2) Selected after consultation with the classroom teacher.
   (3) Appropriate for a variety of learning styles.
   (4) Current.
   (5) Varied in reading level.
   (6) Free of sexual, racial, cultural, and handicapped stereotyping.
   (7) In good physical condition.
   (8) Available in appropriate quantities.
   (9) Representative of New Mexico's multilingual and multicultural population.
   (10) Representative of business and industry for current and projected occupational requirements.
p. Utilize instructional equipment which is:
   (1) Supportive of the written curriculum.
   (2) Selected after consultation with the classroom teacher.
   (3) In good physical condition.
   (4) Appropriate for a variety of learning styles.
   (5) Available in appropriate quantities.
   (6) Well maintained and operable.
   (7) Safe.
   (8) Representative of business and industry for current and projected occupational requirements.

A.4.1.3 The written, delivered, and evaluated curriculum shall be designed to ensure that students have opportunities in all content areas (Educational Standard 4.1.4) to acquire the following competencies:

a. Apply critical thinking skills to everyday situations.
   (1) Formulate and solve problems in numerical and symbolic terms.
   (2) Utilize the problem solving process to identify and state problems as well as propose and evaluate ways to solve them.
   (3) Select and use appropriate approaches and tools in solving problems.
   (4) Draw reasonable conclusions and make critical judgments from information found in various sources, whether written, visual, spoken, tabular, or graphic and defend one's conclusions rationally.
   (5) Use inductive and deductive reasoning and recognize fallacies in reasoning.
   (6) Distinguish fact from opinion and separate one's personal opinions and assumptions from materials, ideas, and works presented.
   (7) Synthesize knowledge and skills for application to new situations.
   (8) Recall, apply, analyze, synthesize, and evaluate information in written, tabular, symbolic, graphic, oral, and aural forms.

b. Engage critically and constructively in the exchange of ideas for effective communication.
   (1) Answer and ask questions coherently and concisely.
   (2) Improve one's own writing by restructuring, correcting errors, and rewriting.
   (3) Vary one's reading speed and method according to the type of material and one's purpose for reading.
   (4) Use general and specific vocabularies.
   (5) Vary the use of spoken and written language to suit different situations.

c. Utilize appropriate study and research skills.
   (1) Locate and use resources external to the classroom (i.e., libraries, computers, interviews, direct observation) and incorporate knowledge from such sources into a lifelong learning process.
   (2) Use features of books and other reference materials, such as table of contents, preface, introduction, titles and subtitles, index, glossary, appendix, and bibliography.
   (3) Use reference materials such as dictionaries, encyclopedias, atlases, and microfiche.

A.4.1.4 Instructional Program Content, K-12

a. The content presented in programs at all levels shall assist students in the development of the competencies specified in Educational Standards 4.1.3 and 4.3.1a.

b. Each student's instructional program shall include but not necessarily be limited to fine arts, computer literacy, comprehensive health education including substance abuse education, language arts, mathematics, physical education, practical arts, science, and social studies including New Mexico History.

c. The extent of offerings for each student in each content area at each level shall be determined by the district. An interdisciplinary or nontraditional approach may be utilized in presenting content.

A.4.2 Promotion Criteria and Entry Placement

A.4.2.1 Upon satisfactory completion of requirements and attainment of competencies at the level determined appropriate by the district, a student may be admitted to the next higher grade.

A.4.3 Graduation Requirements

A.4.3.1 a. To graduate, a student shall earn at least twenty-one (21) units in grades 9 through 12. Twelve units shall include at least the following content and competencies.*

*Graduation requirements become effective with the 1986-87 graduating class. Some of the competencies included within the content requirements may be acquired prior to grade 9. See other publications of the department for further definition of these exit competencies and for suggested competencies at grades 3, 5, and 8.

(1) Language Arts. (Four units of credit.)

(a) Reading
The student shall:

1) Respond to written material by:
   - Comparing (looking at similarities)
   - Contrasting (looking at differences)
   - Observing (using the senses to collect data)
   - Classifying (sorting into categories and naming categories)
   - Visualizing (forming mental images)
   - Summarizing (condensing to core messages)
   - Perceiving (deriving meaning from both stated and implied messages)
   - Analyzing (looking at parts of a whole)
   - Synthesizing (using known data to generate a new idea)
   - Hypothesizing (proposing possible explanations)
   - Critiquing (evaluating, making judgments)
   - Making inferences (differentiating between assumed truth and observable fact, identifying anticipated outcomes)
   - Imagining (creating freely/exercising the mind).
2) Read, with understanding and appreciation, a range of literature rich in quality and representative of different literary forms and various cultures.
3) Understand and use written informational materials such as textbooks, magazines, newspapers, directions, schedules, maps, graphs, etc.
4) Vary reading rate and strategy according to the purpose and type of material.
5) Read independently for personal pleasure and growth.

(b) Writing
The student shall:

1) Write in the appropriate mode for a variety of purposes.
   - To express original thoughts
   - To discover and clarify ideas
   - To communicate complete ideas through written messages and letters
   - To write papers, reports, and business letters
   - To fill out forms and maintain records and for a variety of audiences:
     - Self
     - Teachers
     - Peers

- Relatives
- Business and public organizations
- Others

2) Use writing as a process of communication involving:
   - Formulating ideas
   - Using reasoning strategies
   - Collecting and organizing information
   - Determining the relationships
   - Drafting
   - Using vivid and precise language
   - Arranging paragraphs in an appropriate order and building transitions between them
   - Revising
3) Write sentences and paragraphs using standard grammatical construction, spelling, and mechanics.

(c) Listening

The student shall:

1) Receive and interpret verbal and nonverbal messages and respond with understanding by using active learning techniques and including:
   - Remembering
   - Visualizing
   - Summarizing
   - Classifying
   - Critiquing
   - Predicting
   - Imagining
   - Synthesizing
2) Understand and appreciate a range of aural presentations.

(d) Speaking

The student shall:

1) Use oral and body language to communicate with designated audiences by:
   - Identifying purpose
   - Selecting appropriate language
2) Use speaking as a process of communication by:
   - Organizing content
   - Clarifying thoughts
   - Speaking clearly and fluently
   - Selecting effective vocal skills

(e) Studying
The student shall:

1) Select appropriate sources of information for a specific purpose.
2) Organize materials for study by:
   - Classifying
   - Note taking/outlining
   - Summarizing
   - Synthesizing
3) Use effective study strategies such as
   - Formulas (SQ3R)*
   - Memorization
   - Test-taking
   - Building vocabulary
4) Produce materials in a legible form.

(2) Mathematics. (Two units of credit.)
The student shall:

(a) Compute with whole numbers, fractions, and decimals.
(b) Use rounding and approximation to estimate computation results.
(c) Determine whether the answer to a given problem is reasonable.
(d) Compare two numbers, such as a decimal and a fraction, or a percent and a decimal for equivalence and order.
(e) Apply such basic properties of numbers as odd/even, prime/composite, factors, multiples and place value.
(f) Construct and interpret graphs and tables.
(g) Use appropriate units in the Standard and S.I. (Metric) measurement systems to solve practical measurement problems.
(h) Find perimeters, areas and volumes.
(i) Find the value of a specified variable in a simple linear equation and/or in a given formula after substituting values for the other variables.
(j) Interpret a word problem and compute the answer. (The solution shall require at least three operational steps.)
(k) Apply the principles of percentage to problem-solving.
(l) Apply the principles of ratio and proportion to problem-solving.
(m) Use mathematical concepts and skills in everyday problems relating to consumer affairs.

(3) Science. (Two units of credit, one of which shall be a laboratory science.)

(a) Observing
The student shall:

1) Describe objects and events on the basis of observable characteristics.

*Study, question, read, review, recite.

2) Use indirect methods if direct sense experience is insufficient to describe objects or events.
3) Describe and report data quantitatively.
4) Distinguish between observations and inference.

(b) Classifying
The student shall:

1) Classify objects and events based on observable similarities and differences of selected properties.
2) Use classification keys to place items within a scheme or to retrieve information from a scheme.
3) Construct two or more classification schemes for the same set of objects and develop a classification system.

(c) Inferring
The student shall:

1) Draw logical conclusions or interpretations of events based on given data or premises.

(d) Predicting
The student shall:

1) Suggest the outcome of an event based upon previously observed conditions.
2) Suggest cause and effect relationships within a scientific problem solving situation.

(e) Measuring
The student shall:

1) Measure properties of objects or events by direct comparison with standardized units of measurement.
2) State the parameters of a designated measurement.

(f) Communicating
The student shall:

1) Keep accurate records of observations.
2) Construct a simple data table containing two variables, and label columns, rows, and accurately enter data.
3) Make graphic representations of accumulated records of observation and communicate this information clearly and meaningfully.
4) Construct a simple bar graph properly labeled and scaled.
5) Demonstrate technical writing skills.

(g) Interpreting Data
The student shall:

1) Use processes such as classifying, predicting, inferring, and communicating to interpret data.
2) Revise interpretations of data based on new information or revised data.
3) Formulate conclusions when given appropriate data, tables, and graphs.
4) Abstract important ideas from reading, listening or watching a presentation.

(h) Making Operational Definitions
The student shall:

1) Describe a variable or event in observable and measurable terms to differentiate information from other phenomena.

(i) Formulating Questions and Hypotheses
The student shall:

1) State questions on the basis of observations.
2) Devise a statement which can be tested by experiment.
3) Construct hypotheses from information given in a data table, graph, or picture.
4) Revise hypotheses based on new information.

(j) Experimenting
The student shall:

1) Design data-gathering procedures as well as test a hypothesis.
2) Conduct simple experiments to make observations or to confirm a prediction.
3) Be able to identify variables and the control aspects of an experiment.
4) Consider limitations of methods and apparatus of experimentation.
5) Demonstrate laboratory safety procedures.
6) Demonstrate error analysis and information analysis.

(k) Modeling
The student shall:

1) Devise models on the basis of an acceptable hypothesis or hypotheses that have yet to be tested.
2) Use models to describe and explain interrelationships of ideas.
3) Use a model to visualize the solution to a problem.

(l) Using Quantitative Applications
The student shall:

1) Represent scientific principles using mathematical format.
2) Record measurement using appropriate scientific notation.
3) Identify and demonstrate a relationship between two variables that can be used to make a prediction.
4) Read and interpret numerical values from charts, tables or graphs, and apply results to answering questions.

(m) Recognizing Impact
The student shall:

1) Identify, describe, and discuss contemporary issues in science, such as family planning, patterns of socially transmitted disease, genetic engineering, pesticides, nuclear energy, and pollution as they relate to humans.
2) Recognize the role of the political process in the advancement of science.
3) Describe the effects of science in: consumerism, safety, careers, computers, solar energy, synthetic fuels, and fossil fuels.
4) Recognize the limitations of science.
5) Recognize the impact of the accumulation of new evidence on scientific thought.
6) Recognize how the contributions of science lead to the development of new ideas.
7) Recognize the truth-seeking nature of science.

(4) Social Studies. (Two units of credit, one of which shall be U.S. History and 1/2 of which shall be in Civics and/or Government.)
The student shall:

(a) Demonstrate knowledge of United States History and the ability to analyze that history relative to economic, political, social, and cultural developments.
(b) Demonstrate knowledge of World History and the ability to analyze that history relative to economic, political, social, and cultural development.
(c) Demonstrate knowledge and understanding of the United States Political System and the individual rights and responsibilities within that system.
(d) Demonstrate knowledge of the United States Economic System, the individual's role in that system, and the interaction of the American system with other economic systems.
(e) Demonstrate knowledge of and recognize the influence of Geography (physical, economic, political and cultural) in the development of societies.
(f) Demonstrate knowledge of New Mexico History and the ability to analyze that history relative to cultural, economic, political and social developments.
(g) Develop and apply critical thinking, decision making, research, and communication skills.

(5) Physical Education. (One unit of credit.)
The student shall:

(a) Refine specific skills in order to effectively participate in a variety of lifetime sports and activities.
(b) Demonstrate an acceptable age group level of physical and motor fitness.
(c) Assess knowledge of skill performance, rules, strategy, and terminology for at least three lifetime sports and activities.
(d) Understand and apply biomechanical principles of physical skills necessary to produce skilled movement.
(e) Evaluate the concepts of physical fitness and develop an acceptable individual program to maintain physical fitness throughout life.
(f) Know and use rules and safety measures for all physical activities performed.
(g) Compare and contrast the proper roles of participants and spectators.
(h) Exhibit socially desirable and acceptable behaviors in the areas of respect for others, assuming responsibility, leadership, and contributing to the group.
(i) Set a level of appropriate aspiration for physical performance and be motivated to seek that level.
(j) Integrate the value of fitness and physical activity through an observed commitment to a healthy lifestyle.

(6) Fine Arts or Practical Arts. (One unit of credit to be earned in one or a combination of the following.)

(a) Fine Arts - Dance.
The student shall:

1) Recognize individual abilities and adjust to limitations through dance movement.
2) Discriminate between rhythmical patterns when responding to, participating in, and/or performing dance movement.
3) Demonstrate an appropriate use of space during a variety of dance experiences.
4) Create and perform dance combining locomotor and non-locomotor movements.
5) Improvise in response to specific instructions both individually and in groups.
6) Develop an original dance using elements of choreography.
7) Display desirable interpersonal relationships in dance activities.
8) Exhibit dance related skills in order to experience lifetime dance participation as a means of fitness.
9) Develop self and group evaluation skills related to dance.
10) Appreciate dance as a performer and as a spectator.
11) Identify the role of dance in contemporary culture for leisure time pursuits, health, and social activities.

(b) Fine Arts - Drama
The student shall:

1) Develop self-confidence in front of a group.
2) Develop performance techniques through voice and body.
3) Become aware of and familiar with theater facilities and terminology.
4) Develop and sharpen memory and imagination.
5) Work cooperatively with others toward a common goal.

(c) Fine Arts- Music
The student shall:

1) Make music, alone and with others.
2) Use the vocabulary and notation of music.
3) Acquire a familiarity with a wide variety of music.
4) Improvise and create music.
5) Respond to music in various ways and make aesthetic judgments.
6) Understand the vocational and avocational possibilities in music.

(d) Fine Arts - Visual Arts
The student shall:

1) Create art.
2) Exhibit sensory awareness and problem-solving abilities through art.
3) Respond to art and make aesthetic judgments.
4) Experience historical and cultural art.
5) Appreciate and practice visual arts independently.

(e) Practical Arts
The student shall:

1) Select an occupational cluster and identify the occupational/career opportunities, the career levels available and the training requisites for the cluster.
2) Compare occupational/career requirements, traits, and characteristics to personal aptitudes, abilities, and preferences.
3) Demonstrate basic academic and technical knowledge and skills of the occupational/career area.
4) Demonstrate both job-seeking and job- keeping skills including the skills of completing a job application, applying for a job, and properly dressing for an interview.

APPENDIX B

NEW MEXICO HIGH SCHOOL PROFICIENCY EXAMINATION
GOALS AND OBJECTIVES

Content Area: Community Resources

Goal: To understand how individuals use community resources, including transportation systems, to achieve a more satisfactory way of life.

Major Objective: 1. The individual should know when and how to use recreational resources. This means that he or she should know:

Objective: A. About the types of services offered by various facilities, both public and private, for recreation and entertainment.

Objective: B. How to schedule activities at or through the various facilities.

Objective: C. What types of equipment, or preparation, or previous experiences might be required for participation in various activities.

Major Objective: 2. The individual should know when and how to use informational resources. This means that he or she should know:

Objective: A. Which agencies or facilities (e.g., library, television, radio, newspaper, and bulletin board) provide various types of information.

Objective: B. How to gain access to the various agencies.

Objective: C. The circumstances under which various types of information might be helpful.

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Major Objective: 3. The individual should know how and when to use various community services. This means that he or she should know:

Objective: A. Which agencies or departments provide various types of services.

Objective: B. How to apply for or gain access to various types of community services.

Major Objective: 4. The individual should know how to use transportation systems and services. This means that he or she should:

Objective: A. Know how to determine the appropriate mode of transportation.

Objective: B. Know how to use transportation schedules.

Objective: C. Know how to calculate fares and other costs of transportation.

Objective: D. Know how to use road, city, and special transportation maps.

Objective: E. Know how to make reservations and other travel arrangements.

Objective: F. Know how to drive safely and legally.

Objective: G. Know how to apply for and obtain the various documents associated with travel.

Objective: H. Understand how time zones and daylight saving time may affect travel plans.

Objective: I. Understand how modern transportation causes public problems.

Content Area: Occupational Knowledge

Goal: To develop knowledge and occupations that will enable individuals to secure employment that fits their particular needs and interests.

Major Objective: 1. The individual should understand how education, interests, and experience affect the kinds of employment one can or should pursue. This means that he or she should know:

Objective: A. Which educational and job experiences are required or recommended for specific occupational categories (or families) and how these requirements relate to the duties of the jobs in those categories.

Objective: B. The minimum qualifications for specific jobs.

Objective: C. How vocational testing and counseling can help individuals identify job interests and abilities.

Objective: D. What factors outside the individual might affect his or her job choices or interests.

Objective: E. How to read and assess job descriptions.

Major Objective: 2. The individual should know how to apply for a job. This means that he or she should:

Objective: A. Know how to use various sources to identify job opportunities.

Objective: B. Know how to inquire about or apply for a job.

Objective: C. Know how to fill out the various forms associated with employment.

Objective: D. Understand the compilation, construction, and importance of a resume or a description of previous jobs.

Objective: E. Understand the importance of job interviews and how to act accordingly.

Major Objective: 3. The individual should know how to maintain a job. This means that he or she should:

Objective: A. Know the standards of behavior for various types of employment.

Objective: B. Understand how and why employers make decisions about promotion and dismissal.

Objective: C. Know the legal restrictions that govern employers and employees.

Objective: D. Understand the financial aspects of employment.

Content Area: Consumer Economics

Goal: To know how to manage a family economy and to demonstrate an understanding of sound purchasing practices.

Major Objective: 1. The individual should know how to plan family or individual budgets. This means that he or she should know:

Objective: A. What a budget is and how it should be used.
Objective: B. How to determine individual needs and resources.
Objective: C. How economic factors affect budgeting.

Major Objective: 2. The individual should understand the effective use of money, money substitutes, and financial services. This means that he or she should:

Objective: A. Know how and why income and sales taxes are collected.
Objective: B. Understand the relationship among various denominations of money and among various weights and measures.
Objective: C. Know how to use various media of exchange.
Objective: D. Know the various types of banking services.
Objective: E. Know how to select, purchase, and maintain insurance policies.
Objective: F. Know how to figure costs and change.

Major Objective: 3. The individual should know how to apply the principles of consumer economics when buying, selling, or leasing goods or services. This means that he or she should:

Objective: A. Know how to use catalogs, consumer guides, and other reference documents to select goods and services.

Objective: B. Understand the principles of comparison shopping and the relation of price to quality.

Objective: C. Know various packaging techniques and which are most cost-effective in terms of quality and storage.

Objective: D. Know how to place orders.

Objective: E. Know where to go to purchase particular goods and services.

Objective: F. Know the laws that have been passed to protect consumers.

Major Objective: 4. The individual should understand the economic factors involved in maintaining consumer goods. This means that he or she should:

Objective: A. Know the basic procedures for the care and upkeep of personal possessions.

Objective: B. Understand the relationship of price to the quality and the life of consumer goods.

Objective: C. Understand the principles of crime prevention.

Major Objective: 5. The individual should understand marketing techniques and how these affect the individual, consumers in general, and the economy. This means that he or she should:

Objective: A. Know various modes and techniques of advertising, including inappropriate or illegal techniques.

Objective: B. Know where to go for help in solving consumer complaints or problems.

Objective: C. Know the relationship among cost, availability, and need.

Objective: D. Understand the implications of consumption in light of finite world resources.

Content Area: Mental and Physical Health

Goal: To understand the principles and practices that lead to good mental and physical health.

Major Objective: 1. The individual should know where, when, and why to seek medical help. This means that he or she should:

Objective: A. Recognize obvious signs of illness and know which require professional attention.
Objective: B. Know the various types of medical facilities typically available in a community.
Objective: C. Know how and why to follow medical instructions.
Objective: D. Know how and why to communicate information about health problems to others.

Major Objective: 2. The individual should know what personal habits promote good health. This means that he or she should:

Objective: A. Know the basic principles of health maintenance.
Objective: B. Know the basic principles of nutrition.
Objective: C. Understand the relationship between drugs and health.

Major Objective: 3. The individual should know how to apply principles of health to planning and raising a family. This means that he or she should:

Objective: A. Understand the physical and psychological influences of pregnancy and the need for proper prenatal care.
Objective: B. Understand the importance of family planning and the effectiveness of various birth control methods.
Objective: C. Know basic child-rearing practices.
Objective: D. Understand the special health needs and concerns of adolescents.

Major Objective: 4. The individual should know how to deal with potential hazards and accidents. This means that he or she should:

Objective: A. Recognize potential hazards.
Objective: B. Know where and when to apply basic safety measures.
Objective: C. Know when and how to apply first aid.
Objective: D. Know how and whom to ask for help in emergencies.

Content Area: Government and Law

Goal: To understand how the structures of government and the functions of the legal system delineate rights and obligations.

Major Objective: 1. The individual should understand the structure and functioning of the federal government. This means that he or she should know about the:

Objective: A. Composition and operation of both houses of Congress.
Objective: B. Composition and operation of the executive branch of government.
Objective: C. Relationships between and among the three branches of government.
Objective: D. Relationships between and among the federal, state, and local governments.

Major Objective: 2. The individual should understand the relationship between individual citizens and the selection and maintenance of government. This means that he or she should:

Objective: A. Know about the electoral process and the individual's role in it.
Objective: B. Know about the Constitutional guarantees of individual rights.

Objective: C. Understand how the individual can try to influence her or his representatives.

Objective: D. Know what kinds of demands the government may and does make on individuals.

Major Objective: 3. The individual should understand the relationship between individual citizens and the legal and penal systems. This means that he or she should know:

Objective: A. The composition and operation of the judicial branch of government.

Objective: B. Which acts society deems criminal.

Objective: C. When and how to hire a lawyer or gain access to other forms of legal aid.

Objective: D. An individual's rights when arrested, held, tried, paroled, or pardoned.

Major Objective: 4. The individual should understand the relationship between individual citizens and government services. This means that he or she should understand:

Objective: A. How various kinds of taxes are collected.

Objective: B. The relationship between taxes and social services.

Objective: C. The reasons for social legislation.

SKILLS AND TASKS FOR THE STUDENT WRITING SKILLS APPRAISAL

Skills

The student shall:

1. Convey written information in a manner that is legible to the reader;
2. Spell or abbreviate correctly in written composition;
3. Apply standard use of language mechanics (e.g., use of appropriate punctuation);
4. Select language appropriate for the purpose, occasion, and audience;
5. Write complete sentences of varied length using acceptable syntactic patterns;
6. Use the elements associated with paragraph construction including a topic sentence supported and developed by other sentences;
7. Demonstrate coherence and unity in a multiparagraph composition;
8. Appropriately organize material for the subject, purpose, and audience called for;
9. Employ appropriate letter format depending upon the purpose of the letter; and
10. Complete the task to such a degree as to evoke clearly a sense of closure in the reader.

Tasks

The student shall complete the following tasks demonstrating the applicable skills from the list:

1. The student shall produce ONE of the following:

   a. an abbreviated message suitable for placement as a classified advertisement in a newspaper under a specific heading, such as:

      "Job Wanted" "Merchandise for Sale" "Automobile for Sale"

      The message should utilize as few words as possible while providing adequate identifying information in attempting to sell the person or product or convey the intended message.

b. a completed job application form, the content and design of which are to be chosen by the school or district. The application form utilized could be either a facsimile or an actual job application or a mock application designed by the school or district.

2. The student shall produce a business letter which includes all necessary portions of such a letter: heading, inside address, salutation, closing and signature. The letter shall address ONE of the following topics:

   a. a complaint to the manufacturer concerning the purchase of defective merchandise from a local merchant who now refuses to regain or replace the purchased item. The letter should properly identify the merchandise (model number or name, serial number, cost, etc.) explain the defect and offer the letter writer's expectation of what should be done. (The teacher should develop the specific information required by this task, such as type of merchandise, serial number, costs, addresses, etc., so that the content of the letter will deal with merchandise familiar to the student.);

   b. a request for employment based upon an actual classified advertisement selected by the student from a newspaper. The letter should give the writer's qualifications for the position noted in the advertisement including appropriate experience or training, and request an appointment for an interview at a specific time and date. The student may also include questions he or she might have concerning relevant working conditions, salary, etc.; or

   c. a business letter on a topic chosen by the school or district utilizing the APL Content Goals and Objectives as a guideline of possible topics.

3. The student shall produce a description of ONE of the following:

   a. the requirements for and benefits of a particular career the student wishes to pursue;
   b. an advertising technique or a specific advertisement commonly used by mass communication media or local mercharts and its effect on purchasing; or
   c. a topic chosen by the school or district utilizing the APL Content Goals and Objectives as a guideline of possible topics.

4. The student shall produce a composition which compares and contrasts viewpoints and/or the positive and negative aspects based on readings, research, or personal experience involving ONE of these pairs of concepts:

   a. purchasing an item such as an automobile or stereo on credit versus saving money and purchasing the same item outright;

   b. using mass public transportation system(s) versus driving one's own car;

   c. government control and regulation versus individual rights in relation to a specific topic such as environmental quality, use of natural resources, consumer protection laws, the Constitutional rights of free speech, etc.; or

d. a topic chosen by the school or district utilizing the APL Content Goals and Objectives as a guideline of possible topics.

The writer should establish clear positions substantiated by information or direct experience and not rely solely upon individual preference or conjecture for the positions established. The composition should display a clear distinction between fact and opinion.

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